Supporting Information

Design of Molecularly Imprinted Hydrogels with Thermoresponsive Drug Binding Sites

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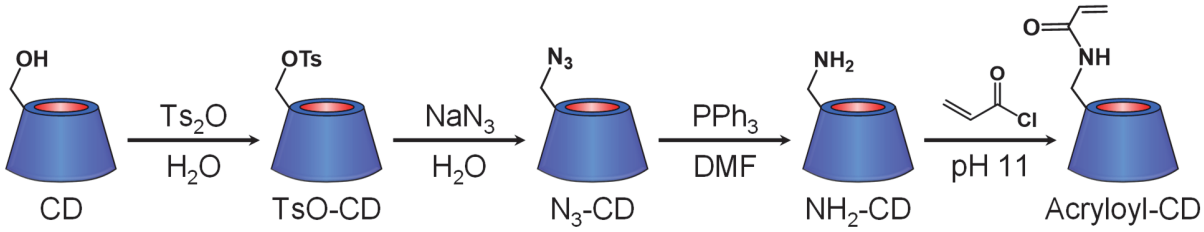

Scheme S1. Synthesis of acryloyl-CD.

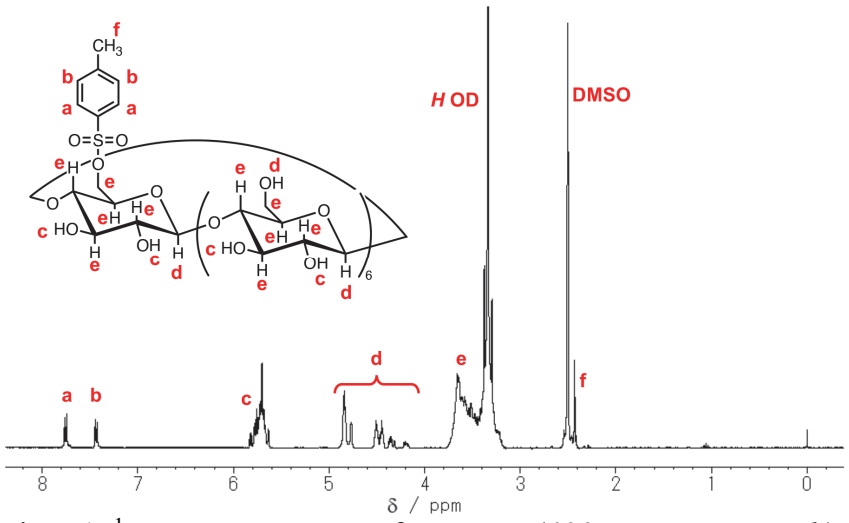

Fig. S1. ^{1}H NMR spectrum of TsO-CD (400 MHz, DMSO-d_6).

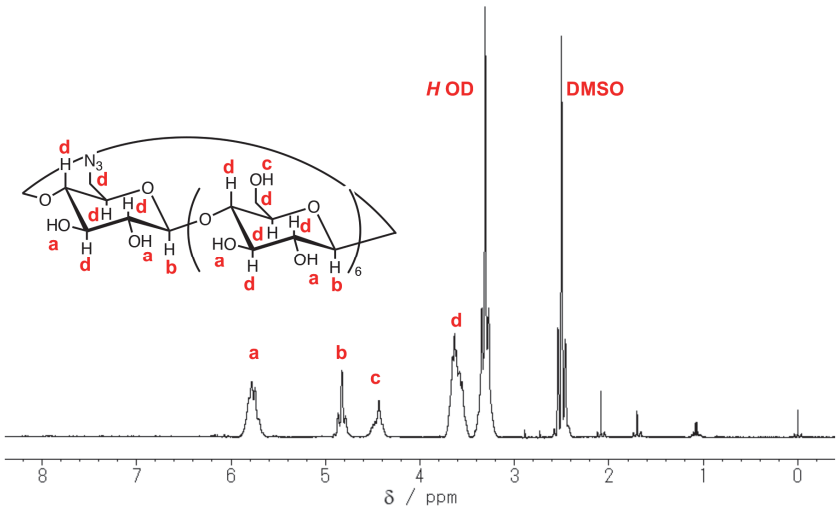

Fig. S2. ^{1}H NMR spectrum of N_3-CD (400 MHz, DMSO-d_6).

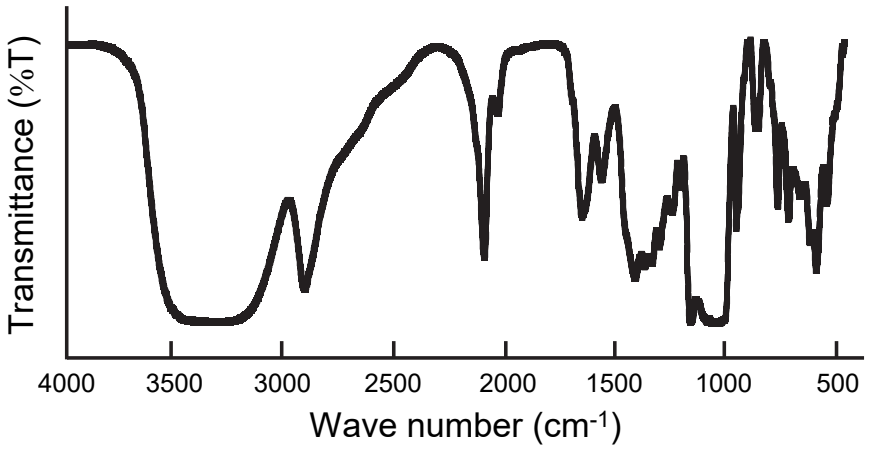

Fig. S3. FT-IR spectrum of N_3-CD.

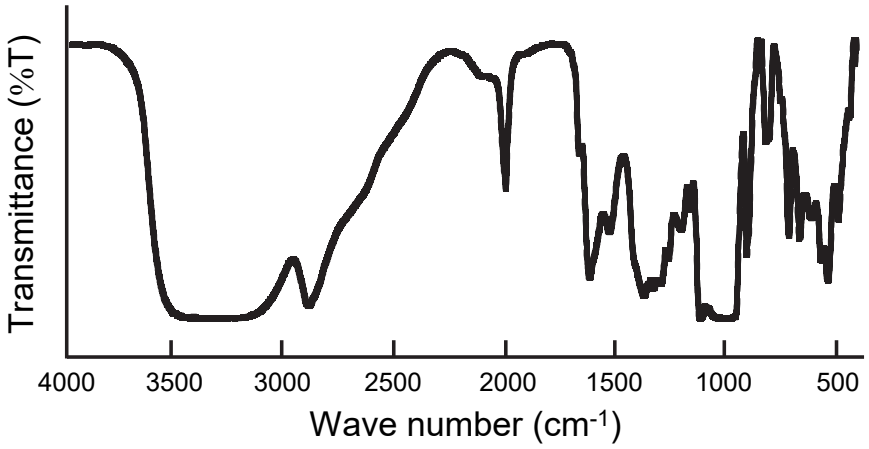

Fig. S4. FT-IR spectrum of NH_2-CD.

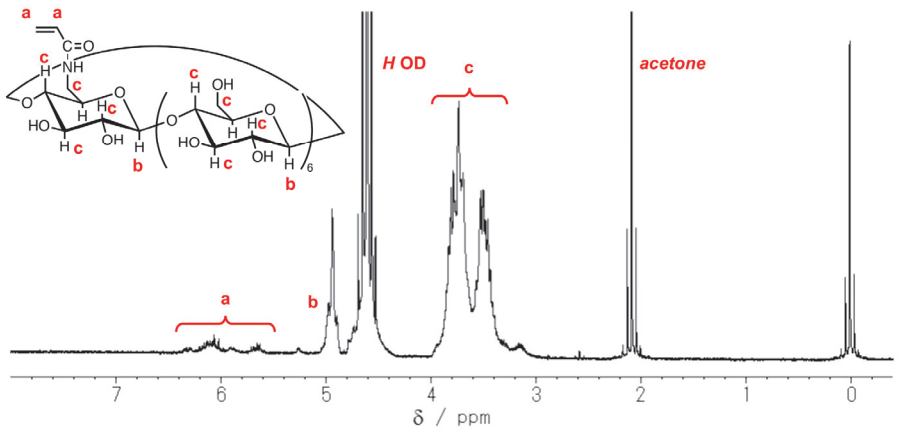

Fig. S5. ^{1}H NMR spectrum of Acryloyl-CD (400 MHz, D_2O).

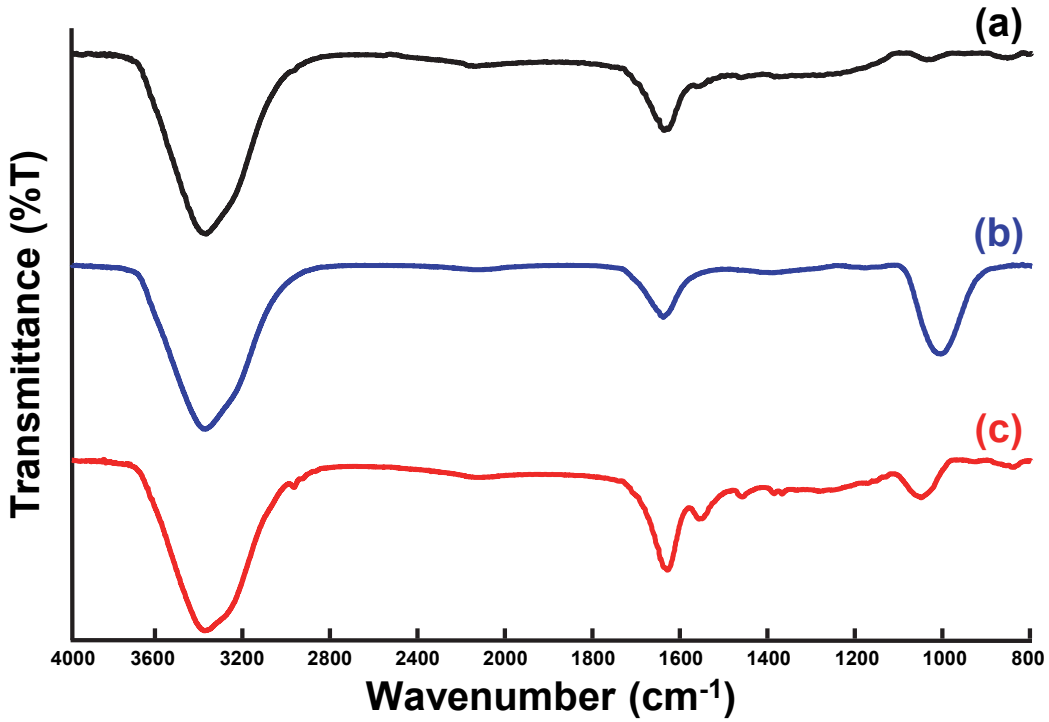

Fig. S6. FT-IR spectra of (a) PNIPAAm hydrogel, (b) β-CD and (c) MIP hydrogel.

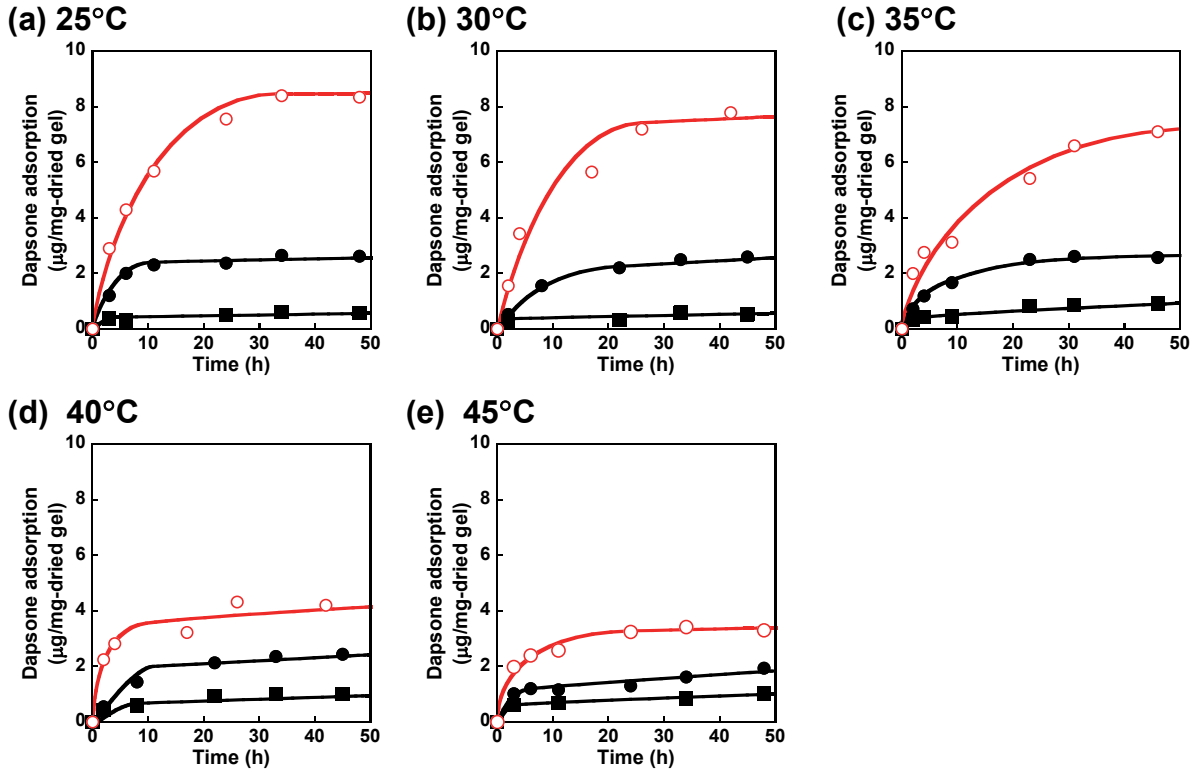

Fig. S7. Adsorption profiles of dapsone into the MIP (○), NIP (●) and PNIPAAm (■) hydrogels in aqueous dapsone solution (0.035 mM) at (a) 25, (b) 30, (c) 35, (d) 40 and (e) 45 °C.

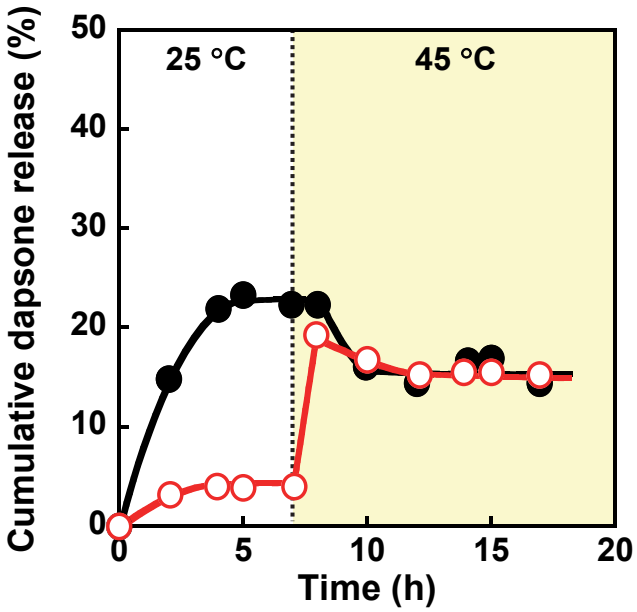

Fig. S8. Release profile of dapsone from the MIP (○) and NIP (●) hydrogels in water when the temperature was switched from 25 to 45 °C.

Table S1. Efficient crosslinking density of (a) MIP, (b) NIP and (c) PNIPAAm hydrogels.

	Crosslinking density (mol/m^3)		
	Water	Dapsone aq.	Change (Δ)
(a) MIP hydrogel	4.47	5.99	1.52
(b) NIP hydrogel	5.49	5.83	0.34
(c) PNIPAAm hydrogel	5.28	5.36	0.08